

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-276947

(43)Date of publication of application : 12.10.1999

(51)Int.Cl.

B05B 15/04

(21)Application number : 10-100450

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(22)Date of filing : 27.03.1998

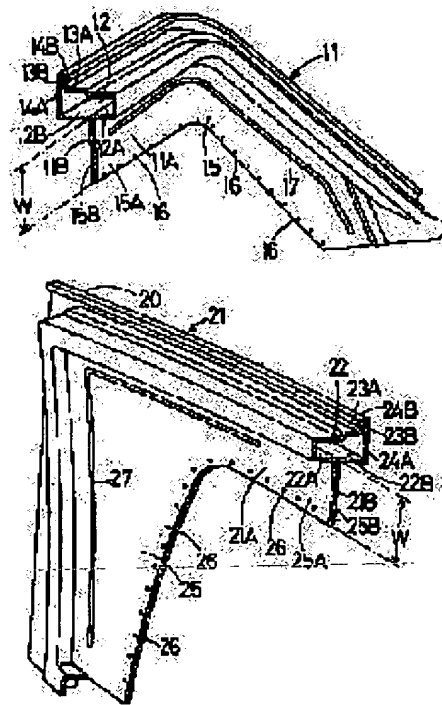
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## (54) MASKING MATERIAL FOR WINDOW FRAME

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To surely prevent a coating material from penetrating into the inside of a window with shielding plates at the time of performing coating by forming a masking material for a window frame of an automobile door, or the like, in such a way that shielding plates extending from window frame fitting parts of the masking material respectively to the inside of a window are placed.

**SOLUTION:** This masking material comprises: a front edge part 11 that is formed by sticking two formed sheets 11A and 11B together; a rear edge part 21 formed by sticking two formed sheets 21A and 21B together; window frame fitting parts 12 and 22 formed with two formed sheet bulging parts 12A and 12B and two formed sheets 22A and 22B respectively in the upper edge part of the masking material; flanges 13A and 13B and flanges 23A and 23B, which are formed in such a way that they extend from upper ends of the window frame fitting parts 12 and 22, respectively; bending parts 14A, 14B and 24A, 24B formed at the upper edges of flanges 13A, 13B and 23A, 23B, respectively; and shielding plate parts 15A, 15B and 25A, 25B, which are formed sheets, respectively and placed inside the window frame fitting parts 12 and 22, respectively and each of which extends from the window frame fitting part 12 or 22 to the inside of a window, wherein such pairs of formed sheets, i.e., a pair of the shielding plate parts 15A, 15B and



25A, 25B are joined together respectively at their respective lower edges with spot ultrasonic welding (at position 16 and 26), to overlap the pair of shielding plate parts 15A, 15B and 25A, 25B, respectively to form shielding plates 15 and 25.

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#### LEGAL STATUS

[Date of request for examination] 13.12.2004

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the masking material used in order to protect the window frame of the door of an automobile from paint.

[0002]

[Description of the Prior Art] In case spray painting of the car body of an automobile is carried out, a door is performed in the condition of having closed. Therefore, the door window frame by which unique paint is carried out must be protected by masking material in the case of car-body paint. As shown in drawing 12, the conventional masking material (51) is the typeface of cross-section KO, the window frame fitting section (52) is formed inside, and it turns to both margo inferior inside, and it is a flange (53 53). It is installed. Fitting of this masking material (51) is carried out to a door window frame (42), and paint of a car body is performed.

[0003]

[Problem(s) to be Solved by the Invention] As described above, spray painting of an automobile car body is performed where a door is shut. However, although a door window frame will be protected from paint if the conventional masking material is used, a coating trespasses upon the interior of this door window frame inside empty vehicle object.

[0004]

[Means for Solving the Problem] as The means for solving a technical problem of the above-mentioned former [ this invention ] -- the window frame fitting section (12 22) this window frame fitting section (12 22) from -- shield (15 25) installed in the aperture inside from -- becoming masking material for window frames (1) It is what is offered. this masking material -- shaping sheet (11A, 11B, 21A, 21B) of two sheets It becomes. from -- This shaping sheet (11A, 11B, 21A, 21B) Shield (15 25) It is desirable adhesion or to carry out welding in the edge part, and, as for the ingredient of this masking material, it is desirable that it is engineer plastics.

[0005]

[Embodiment of the Invention] If one example which shows this invention to drawing 1 - drawing 10 explains, masking material (1) will consist of the first transition section (11) and the trailing-edge section (21). It is the shaping sheet (11A, 11B, 21A, 21B) of two sheets respectively. It is constituted by lamination \*\*\*\*\*. In rising wood, it is each shaping sheet (11A, 11B, 21A, 21B). Bulge section (12A, 12B, 22A, 22B) Window frame fitting section (12 22) It is formed. This window frame fitting section (12 22) From upper limit, a flange (13A, 13B, 23A, 23B) is formed in each shaping sheet (11A, 11B, 21A, 21B). This flange (13A, 13B, 23A, 23B) In an upper limb, it is the typeface flection (14A, 14B, 24A, 24B) of KO. It is formed. This window frame fitting section (12 22) In the inside, it is each shaping sheet (11A, 11B, 21A, 21B). Shield section (15A, 15B, 25A, 25B) It is installed. Both shaping sheets (11A, 11B, 21A, 21B) It sets to the margo inferior of this shield section (15A, 15B, 25A, 25B), and is spot ultrasonic welding (16 26). It pastes up. Each shaping sheet (11A, 11B, 21A, 21B) Shield section (15A, 15B, 25A, 25B) It is a shield (15 25) by superposition. It is constituted. and this shield (15

25) \*\*\*\* -- reinforcing rib (17 27) \*\*\*\* to a front-face side It is formed. Moreover, this shield (15 25) As for width W, it is desirable that it is 1cm or more.

[0006] As the first transition section (11) is shown in drawing 3 , it is one [ further ] shaping sheet (11A). As a reinforcement protruding edge (18) is formed in the front end section and the trailing-edge section (21) is shown in drawing 4 , it is a shaping sheet (21B). The reinforcement sheet (28) has pasted the near corner.

[0007] The above-mentioned masking material (1) For example, polystyrene, polyethylene, Polypropylene, ethylene propylene rubber, a polyvinyl chloride, A vinylidene-chloride copolymer, an ethylene-vinylacetate copolymer, thermoplastic polyester, A polyamide, polyacetal, a polycarbonate, polyethylene terephthalate, Polybutylene terephthalate, polyphenylene ether, polyphenylene oxide, Polysulfone, polyether sulphone, a polyphenylene sulfide, Polyarylate, a polyether ether ketone, crystalline polyester, Polyamidoimide, polyimide, polyether imide, poly amino bismaleimide, Thermoplastics, such as engineering plastics, such as a methyl pentene copolymer and cellulose acetate, Or it is manufactured by being made from two or more sorts of mixture of the above-mentioned thermoplastics etc., and carrying out the vacuum forming of the sheet of this thermoplastics desirably.

[0008] To this thermoplastics, for example, a calcium carbonate, a magnesium carbonate, A barium sulfate, a calcium sulfate, calcium sulfite, calcium phosphate, A calcium hydroxide, a magnesium hydroxide, an aluminum hydroxide, a magnesium oxide, Titanium oxide, an iron oxide, a zinc oxide, an alumina, a silica, diatomaceous earth, a dolomite, Gypsum fibrosum, talc, clay, asbestos, a mica, a calcium silicate, Ben Knight, White carbon, carbon black, iron powder, aluminium powder, silica flour, Inorganic bulking agents, such as a blast furnace slag, fly ash, cement, and zirconia powder, Natural fibers, such as cotton, a bamboo, hemp, and wool, a polyamide fiber, polyester fiber, An acrylic fiber, viscose fiber, an acetate fiber, vinyl chloride fiber, Organic synthesis fiber, such as a vinylidene chloride, an asbestos fiber, a glass fiber, Inorganic fibers, such as a carbon fiber, ceramic fiber, a metal fiber, and a whisker, a linter, Reinforcing materials, such as organic fillers, such as linen, sisal, wood flour, coconut powder, walnut powder, starch, and wheat flour, are added. Configuration holdout, May make dimensional stability, compression, tensile strength, etc. improve, and further A flame retarder, Kinds, such as plasticizers, such as coloring agents, such as foaming agents, such as a flame proofing agent, an insecticide, antiseptics, waxes, lubricant, an antioxidant, an antioxidant, an ultraviolet ray absorbent, an antistatic agent, a crystallization accelerator, a chemistry foaming agent, and a capsule mold foaming agent, a color, and a pigment, and DOP, DBP, or two sorts or more may be mixed.

[0009] For pasting up both above-mentioned shaping sheets, adhesion by adhesives, the welding by the RF or the supersonic wave, firm attachment by adhesive tape, etc. are applied. Moreover, a reinforcement sheet (28) is the above-mentioned masking material (1). The same ingredient is used and it is this masking material (1). For sticking this reinforcement sheet (28) on-the-corner of the trailing-edge section (21), adhesion by adhesives, the welding by the RF or the supersonic wave, etc. are applied.

[0010] The above-mentioned masking material (1) Each of the first transition section (11) and the trailing-edge section (21) is attached in the first transition section (43) and the trailing-edge section (44) of a window frame (42) of the automobile (40) shown in drawing 5 . [ of a door (41) ] This masking material (1) In order to attach the first transition section (11) and the trailing-edge section (21) in the first transition section (43) and the trailing-edge section (44) of a window frame (42) of a door (41) it is shown in drawing 6 and drawing 7 -- as -- each shaping sheet (11A, 11B) of the first transition section (11) of this masking material (1), and the trailing-edge section (21) And shaping sheet (21A, 21B) It opens from upper limit and the first transition section (43) and the trailing-edge section (44) of this window frame (42) are put between them. And this masking material (1) Each shaping sheet of the first transition section (11) and the trailing-edge section (21) (11A, 11B) And shaping sheet (21A, 21B) As it closes and is shown in drawing 8 and drawing 9 , it is a shaping sheet (11A, 21A). Flection of an upper limb (14B, 24B) It inserts in and fixes. In this case, this masking material (1) Shaping sheet of the trailing-edge section (21) (21B) Since the reinforcement sheet (28) is stuck on the near corner, rigidity is given to this corner configuration and it sets to this corner, and it is a flection (24A, 24B). It can insert in

just. Adhesive tape may be further put on the above-mentioned \*\*\*\*\* doubling part.

[0011] Thus, as shown in drawing 10, it is masking material (1). It is attached in the window frame (42) of a door (41), and spray painting of the car body of an automobile (40) is carried out after that. this masking material (1) The window frame fitting section (12 22) from -- the aperture inside -- shield (15 25) since it is installed -- a window frame (42) -- this masking material (1) although protected from this spray painting -- further -- this masking material (1) Shield (15 25) It is prevented that a coating trespasses upon the interior of a car body. moreover, masking material (1) Shield (15 25) \*\*\*\* -- reinforcing rib (17 27) \*\*\*\* to a front-face side since it is formed -- masking material (1) the coating adhering to rising wood -- shield (15 25) it being transmitted and flowing down -- this reinforcing rib (17 27) It is prevented.

[0012] Other examples of this invention are shown in drawing 11. The masking material (31) of this example consists of a thermoplastic one sheet-plastic moldings, and consists of a shield (33) installed in the aperture inside from the window frame fitting section (32) and this window frame fitting section (32).

[0013]

[Effect of the Invention] Since the shield is installed in the aperture inside from the window frame fitting section, as for the masking material of this invention, it is prevented certainly that a coating invades into the aperture inside with this shield in the case of paint.

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[Translation done.]